

CLAIMS

1. A detonator assembly which includes a first cable coil with first and second ends, a second cable coil with third and fourth ends, a detonator connected to the first end of the first cable coil, a first connector connected to the second end of the first cable coil and to the third end of the second cable coil, and a second connector connected to the fourth end of the second cable coil and wherein a first variable length of cable, extending from the first end, can be drawn from the first cable coil without materially moving the first connector and a second variable length of cable, extending from the fourth end, can be drawn from the second cable coil without materially moving the first connector.
2. A detonator assembly according to claim 1 wherein the first cable coil is provided in the form of a first tubular roll.
3. A detonator assembly according to claim 2 wherein the first end is inside the first tubular roll.
4. A detonator assembly according to any one of claims 1 to 3 wherein the second cable coil is in the form of a second tubular roll.
5. A detonator assembly according to claim 4 wherein the fourth end is inside the second tubular roll.
6. A detonator assembly according to any one of claims 1 to 5 wherein each cable coil is at least partly enclosed in sheet material.

7. A detonator assembly according to any one of claims 1 to 6 wherein the cable coils are co-axially aligned with each other.
8. A detonator assembly according to any one of claims 1 to 7 which includes confinement structure for maintaining the cable coils in a desired configuration.
9. A detonator assembly according to claim 8 wherein the confinement structure is a housing which is made from rigid sheet material.
10. A detonator assembly according to claim 8 wherein the confinement structure comprises flexible sheet material.
11. A detonator assembly according to claim 10 wherein the flexible sheet material is shrunk onto the cable coils.
12. A detonator according to any one of claims 8 to 11 wherein the first connector is accessible without removing the confinement structure.
13. A detonator according to any one of claims 8 to 12 wherein the confinement structure includes first and second compartments for the first and second cable coils respectively.
14. A detonator assembly according to claim 10 or 11 wherein the confinement structure is circular cylindrical.
15. A detonator assembly according to claim 10 or 11 wherein each cable coil comprises a plurality of windings which are arranged in overlying layers

around a hollow core and which form a circular cylindrical shape, with the first end extending from an innermost winding of the first cable coil, and the fourth end extending from an innermost winding of the second cable coil, the detonator assembly including confinement structure around the cable coils.

- 5        16.    A detonator assembly which includes first and second cable coils, a detonator which is connected to one end of the first cable coil, a first connector which connects an opposing end of the first cable coil to one end of the second cable coil, a second connector which is connected to an opposing end of the second cable coil, and confinement structure around the
- 10       first and second cable coils.
17.    A method of forming a cable coil assembly which includes the steps of drawing cable from a supply source and winding a single coil of a first predetermined length around a first former, severing the cable so that the single coil is separated at a first end from the supply source, and forming a
- 15       first cable coil by winding cable, of a second predetermined length which is shorter than the first length, drawn from the single coil, commencing at the first end, around a second former, and thereby simultaneously forming a second cable coil of a length which is substantially equal to the difference between the first and second lengths.
- 20       18.    A method according to claim 17 wherein the single coil is formed by winding the cable in a first direction around the first former and the first coil is formed by winding cable drawn from the single coil in a second direction around the second former, wherein the first direction is opposite to the second direction.

19. A method of installing a plurality of detonators in a respective plurality of boreholes in a daisy-chain configuration which includes the steps, for each borehole, of drawing a first length of cable from a first cable coil in confinement structure, positioning a first detonator which is connected to a first end of the first length of cable at a predetermined depth inside the respective borehole, drawing a second length of cable from a second cable coil inside the confinement structure and connecting a first connector which is at a junction of the first and second coils, at the confinement structure, to a second connector which is at an end of a respective second length of cable associated with a first borehole.
20. A method according to claim 19 which includes the step of connecting a respective second connector at an end of the second length of cable, associated with the respective borehole, to a respective first connector at a second borehole.